

Report to Agency Officials

February 2005

LOAN COMMITMENTS

Issues Related to Pricing, Trading, and Accounting





Highlights of GAO-05-131, a report to agency officials

### Why GAO Did This Study

Federal banking regulators reported that commercial banks held about \$1.6 trillion in syndicated loans in 2003. Loan commitments—a promise to make a set amount of credit available in the future—represented \$1 trillion (about 64 percent) of these loans. Issues have been raised whether commercial banks systematically underprice loan commitments and whether generally accepted accounting principles provide meaningful disclosure of the economics of these commitments.

This report discusses (1) differences between the pricing of loan commitments and loans, and assesses data that are available about the trading of loan commitments; (2) the extent to which credit default swaps are used to reduce the credit risk from loan commitments, and what credit default swap prices indicate about the prices of loan commitments; and (3) differences between commercial and investment banks' accounting treatment of loan commitments, and the strengths and weaknesses of fair value accounting.

### **What GAO Recommends**

GAO is making no recommendations in this report.

www.gao.gov/cgi-bin/getrpt?GAO-05-131.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Richard Hillman at (202) 512-8678 or hillmanr@gao.gov.

# LOAN COMMITMENTS

# Issues Related to Pricing, Trading, and Accounting

### What GAO Found

Loan commitments and loans have different characteristics, making it difficult to directly compare the prices of these instruments. First, a loan commitment gives a company the option to borrow a certain amount in the future, while a loan actually provides funds to the borrower. Second, lenders typically charge fees for making credit contingently available through a loan commitment but charge interest on a loan. Third, loan commitments are typically unsecured—that is, borrowers do not have to pledge collateral—while loans are typically secured. Most of those we interviewed told us that loan commitments are rarely traded in the secondary market because selling them could jeopardize relationships with borrowers and because institutional investors were reluctant to purchase them. Some investment bankers expressed concerns that loan commitments were systematically underpriced, but the available information did not support such assertions.

Commercial bankers told us that they used credit default swaps—contracts that can transfer the credit risk of a loan or loan commitment to another party—to reduce credit risk on small amounts of their loan commitment portfolios. Some investment bankers contended that credit default swaps and loan commitments were similar instruments and that credit default swap prices could provide information about the appropriateness of prices for loan commitments. We found that it was not possible to use credit default swap prices to determine the appropriateness of prices for loan commitments. Specifically, they differed in triggering events, payment schedule, trading, and financial covenants.

Under current accounting standards, designed to reflect their respective business models, commercial and investment banks account for loan commitments differently, causing a temporary difference in the recognition of fee income. Further, revenue from fee income appeared to be relatively small compared with revenue from other bank activity and the difference would be resolved by the end of the commitment period. As a result, we did not find any evidence that following a different accounting model offered the commercial banks a consistent competitive advantage over investment banks. Further, commercial and investment banks have similar fair value financial statement disclosure requirements and, as a result, provide similar information about the fair value of their financial instruments. It appears that the economic substance of loan commitments is recognized in the financial statements and related footnotes in a clear, measurable, and evident fashion under both the historic cost and fair value approach. While some have indicated that fair value accounting might disclose more relevant information than the historical cost model, all the conceptual and implementation issues have not been resolved. Until these issues are resolved, commercial and investment banks will continue to follow different accounting models for loan commitments.

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### **Abbreviations**

AICPA	American Institute of Certified Public Accountants
FASB	Financial Accounting Standards Board
FDIC	Federal Deposit Insurance Corporation
ISDA	International Swaps and Derivatives Association
LIBOR	London Inter Bank Offered Rate
OCC	Office of the Comptroller of the Currency
SEC	Securities and Exchange Commission
S&P	Standard and Poor's
SFAS	Statement of Financial Accounting Standards
SNC	Shared National Credit

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# United States Government Accountability Office Washington, D.C. 20548

February 14, 2005

The Honorable Alan Greenspan Chairman Board of Governors of the Federal Reserve

The Honorable Donald E. Powell Chairman Federal Deposit Insurance Corporation

The Honorable Julie L. Williams Acting Comptroller of the Currency

The Honorable William H. Donaldson Chairman Securities and Exchange Commission

In 2003, federal bank regulators reported that commercial banks held about \$1.6 trillion in syndicated loans—those provided to corporate borrowers by a group of lenders rather than a single lender. These loans are an important source of credit for large and mid-sized corporations in the United States. Syndicated loans include both loan commitments (a promise to make a set amount of credit available in the future under certain terms and conditions) and funded loans. For 2003, loan commitments represented \$1 trillion (about 64 percent) of the syndicated loans reported by federal banking regulators.

Issues have been raised about whether commercial banks systematically underprice loan commitments and whether generally accepted accounting principles facilitate the meaningful disclosure of the economic implications of these commitments. In our October 2003 report on bank tying, we reported that based on our review of specific transactions, information about underpricing was ambiguous and subject to different

<sup>&</sup>lt;sup>1</sup>Syndicated loan amounts as reported by the Shared National Credit Program. The Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency established the Shared National Credit Program in 1977, and in 2001 the Office of Thrift Supervision became an assisting agency. The annual program, which seeks to provide an efficient and consistent review and classification of large syndicated loans, generally covers loans or loan commitments of at least \$20 million that are shared by three or more commercial banks.

interpretations.<sup>2</sup> In addition, we reported that commercial and investment banks adhere to different accounting rules, causing a temporary difference in the recognition of the service fees from loan commitments. We further reported that the volatility of the fair value of loan commitments was more transparent on investment banks' financial statements. However, we did not find any evidence that the accounting rules offered commercial banks a consistent competitive advantage over the investment banks. Further, we found that the revenue from loan commitments was relatively small compared with revenue from other bank operations and the difference in service fee recognition was temporary. Because of the significant amount of outstanding loan commitments and concerns about the accounting treatment for such commitments, we conducted a more in-depth review of the prices of and accounting for loan commitments.

We discuss the following in this report: (1) the differences between the price of loan commitments and loans; (2) data that are publicly available about the trading of loan commitments; (3) the extent to which credit default swaps are used to reduce the risks associated with loan commitments, the similarities and differences between credit default swaps and loan commitments, and what, if anything, the prices of credit default swaps indicate about the prices of loan commitments;<sup>3</sup> (4) the differences between a commercial and investment bank's accounting for loan commitments and whether there is evidence that these differences in accounting treatment provide either type of bank with a consistent competitive advantage; and (5) the strengths and weaknesses of fair value accounting and the projects that the Financial Accounting Standards Board (FASB), which sets the private sector accounting and reporting standards, has underway that may change the way commercial and investment banks account for loan commitments.

<sup>&</sup>lt;sup>2</sup>GAO, Bank Tying: Additional Steps Needed to Ensure Effective Enforcement of Tying Prohibitions, GAO-04-3 (Washington, D.C.: Oct. 10, 2003).

<sup>&</sup>lt;sup>3</sup>Credit default swaps are financial contracts that allow the transfer of credit risk from one market participant to another, potentially facilitating greater efficiency in the pricing and distribution of credit risk among financial market participants.

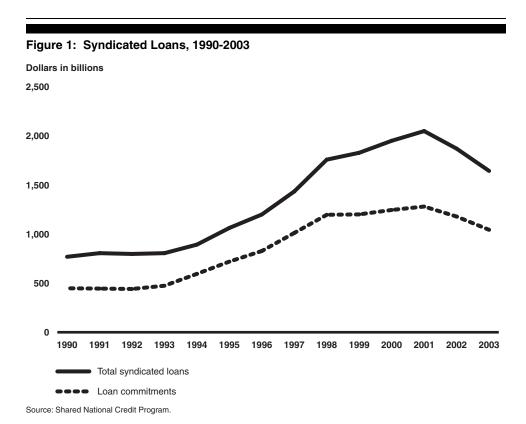
During our review, we obtained the perspectives of officials from six large commercial banks that arranged about 67 percent of total U.S. syndicated loan volume in 2003. To obtain the views of other loan market participants, we also met with officials from two large investment banks that are active in the syndicated loan market. To determine the differences between the price of loan commitments and loans, we analyzed data compiled by a loan pricing data firm, and we interviewed commercial and investment bankers, federal bank regulators, and officials from credit rating agencies. To determine what data were publicly available about the trading of loan commitments, we reviewed secondary loan market trading data compiled by a loan pricing data firm and other financial literature related to secondary loan market trading. To determine the extent to which credit default swaps were used to reduce the risk exposure of loan commitments. the similarities and differences between credit default swaps and loan commitments, and what, if anything, the prices of credit default swaps indicate about the prices of loan commitments, we reviewed data on credit default swaps compiled by federal banking regulators and a global derivatives trade association, and we interviewed commercial and investment bankers, officials from a loan market data collection firm, and other industry observers. To determine whether the differences between a commercial and investment bank's accounting for loan commitments provide either firm with a consistent competitive advantage, the strengths and weaknesses of fair value accounting, and the projects that FASB has underway that might change the way commercial and investment banks account for loan commitments, we reviewed our previous comparative analysis of applicable accounting standards and updated our understanding through interviews with officials from FASB as well as reviewing a recently issued accounting exposure draft. We assessed all data for reliability and found them to be sufficiently reliable for the purposes of our reporting objectives.

# Background

Since the mid-1990s, large and mid-sized U.S. corporations have increasingly used syndicated loans as a source of credit. Federal banking regulators collect data on large loan commitments and loans shared by three or more commercial banks as part of the Shared National Credit

<sup>&</sup>lt;sup>4</sup>Based on Loan Pricing Corporation 2003 U.S. Syndicated Loan League Table.

(SNC) Program.<sup>5</sup> SNC program data show that outstanding loan commitments held by commercial banks increased from \$448 billion in 1990 to more than \$1 trillion in 2003 (see fig. 1).



Most loan commitments and loans to large and mid-sized corporations are made as part of a syndicated loan package. A syndicated loan can include several components, including a revolving credit line, a 364-day back-up facility, and a term loan. A revolving credit line or revolver—the equivalent of a corporate credit card—allows borrowers to draw down, repay, and reborrow specified amounts on demand. A 364-day facility is a specific type of revolving credit line that has a maturity of less than 1 year and is commonly used as a backup line by corporations that issue commercial

<sup>&</sup>lt;sup>5</sup>The SNC Program covers any loan or loan commitment of at least \$20 million that is shared by three or more supervised institutions.

paper.<sup>6</sup> A term loan is a loan that borrowers repay in a scheduled series of repayments or a lump-sum payment at maturity.

Syndicated loans are arranged by a commercial or investment bank, which is referred to as the "lead bank." Large commercial and investment banks compete to lead syndications and offer a potential borrower a syndicated loan package that specifies various fees for loan commitments and terms for loans. For large syndicated loans, there may be one or more lead banks. The lead bank finds potential lenders and arranges the terms of the loan on behalf of the lending group, which can include commercial or investment banks and institutional investors, such as mutual and hedge funds and insurance companies. However, each participating lender has a separate credit agreement with the borrower for the lender's portion of the syndicated loan. In 2003, 3 large commercial banks arranged 59 percent of U.S. syndicated loans, and 10 large commercial banks arranged 84 percent of syndicated loans.

Borrowers pay members of the lending group various fees associated with syndicated loans. For example, borrowers pay the lead bank(s) fees to arrange and administer the syndication. They also pay an up-front fee to all participants in the syndicate upon the closing of a loan. Other fees that borrowers pay the lenders include:

- a commitment fee, which is paid to lenders on undrawn amounts under a revolving credit or a term loan prior to usage;
- a facility fee, which is paid against the entire amount of a revolving credit regardless of usage and is often charged instead of a commitment fee; and
- a usage fee, which is paid when the utilization of a revolving credit falls below a certain minimum.

Borrowers also make interest and principal payments to the lenders for amounts that are drawn under loan commitments and loans. Figure 2 illustrates an example of a hypothetical syndicated loan package.

<sup>&</sup>lt;sup>6</sup>Commercial paper is an unsecured obligation issued by a corporation or bank to finance its short-term credit needs, such as accounts receivable and inventory. Companies that are able to issue commercial paper are those with high credit ratings.

<sup>&</sup>lt;sup>7</sup>Based on Loan Pricing Corporation 2003 U.S. Syndicated Loan League Table.

Loan fees; principal and interest payments ABC Commercial Commercial Investment Investment Lead bank bank A bank B bank C bank D Corporation Loan package: \$100 million revolving credit line \$250 million term loan

Figure 2: Example of Hypothetical \$350 Million Syndicated Loan Package to ABC Corporation

Sources: GAO and Art Explosion (images).

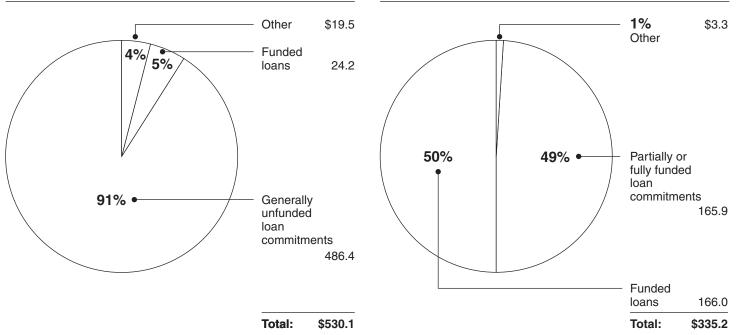
The U.S. syndicated loan market can be divided into two segments, investment grade and leveraged. The investment-grade segment is confined to the most creditworthy borrowers. In 2003, most syndicated loans to investment-grade borrowers were loan commitments that generally remained unfunded (see fig. 3). The leveraged segment is composed mainly of lesser quality borrowers, defined either by their credit rating or the higher interest rate charged on their loans. Figure 3 also shows that syndicated loans to leveraged borrowers were almost exclusively funded loans or partially or fully funded loan commitments.

<sup>&</sup>lt;sup>8</sup>Standard and Poor's (S&P), FitchRatings, and Moody's are credit rating firms that rate companies according to their creditworthiness. For S&P and FitchRatings, ratings range from AAA (prime, maximum safety) to D (default), with ratings above BB+ considered investment grade. For Moody's, the corresponding ratings range from Aaa to C, with ratings above Ba1 considered investment grade.

Figure 3: Level of Funding for Investment-Grade and Leveraged Loans and Commitments, 2003



#### Leveraged loans (dollars in billions)



Source: GAO analysis of Loan Pricing Corporation data.

Note: Other includes standby letters of credit, synthetic leases, and other leases.

After a syndicated loan is closed and allocated among participating lenders, these lenders can adjust their loan portfolios by trading these instruments in the secondary loan market. This trading generally occurs through dealer desks established by large commercial and investment banks. Commercial banks and other financial institutions have increasingly used the secondary market to trade loans. In 2003, the volume of secondary loan market trading totaled \$144.57 billion.<sup>9</sup>

Loan commitments and loans expose lenders to credit risk—the possibility of loss due to a borrower's default or inability to meet contractual payment terms. Commercial and investment banks can use credit default swaps—essentially insurance against borrower default or other credit event—to

<sup>&</sup>lt;sup>9</sup>Loan Pricing Corporation.

transfer to another party (the guarantor) the credit risk from a loan commitment or loan, without actually selling the asset. When a commercial or investment bank purchases a credit default swap, they agree to make periodic payments to a guarantor who is contractually obligated to pay the bank in the event of a specified credit event, such as loan repayment delinquency, default, or credit-rating downgrade (see fig. 4). According to the International Swaps and Derivatives Association (ISDA), global credit default swap contract amounts totaled \$3.78 trillion in December 2003. However, only a small portion of this amount was used for reducing the credit risk associated with loan commitments.

Commercial or investment bank
(Holder of loan commitment or loan)

Contingent payment

Triggered by credit event, which may include bankruptcy, failure to pay, credit downgrade, restructuring, etc.

Figure 4: Commercial and Investment Bank Use of Credit Default Swap

Source: GAO.

Under current accounting standards, designed to reflect their respective business models, commercial and investment banks account for loan commitments differently. Commercial banks use a mixed attribute model to account for their various products and services. As a result, some financial assets and liabilities, including loan commitments, are measured at the historical transaction price (cost), some at the lower of cost or market value, and some at fair value. The historic transaction price (cost) of a loan commitment is the value of the loan commitment service fees at the time a firm extends the commitment. In contrast, investment banks generally follow a fair value accounting model in which they report

<sup>&</sup>lt;sup>10</sup>The \$3.78 trillion of credit default swap contracts reported by ISDA represents the *notional principal*—the amount that is used to calculate payments in a swaps transaction rather than the actual value of the swaps transaction. A credit default swap is the most commonly used type of *credit derivative*, an arrangement that allows one party—the protection buyer—to transfer credit risk to one or more parties—the protection sellers. Other credit derivatives include total return swaps and credit-linked notes.

inventory, which may include loans or loan commitments, at fair value. The fair value of a loan commitment is the price at which it can be exchanged between willing, knowledgeable parties without any compulsion such as a forced liquidation or distress sale. Changes in the fair value of an investment banks inventory are included in earnings in the periods in which the changes occur. FASB has established these different accounting models because investment and commercial banks have different business models. For example, commercial banking activities have traditionally included accepting deposits, originating loans, and holding loans. These banks generally have the intent and ability to hold the vast majority of their loan commitments and loan portfolios until maturity and usually have a relatively small amount of loans held for sale. Investment bank activities have traditionally included buying, holding as inventory, and selling various financial instruments. <sup>11</sup> Investment banks generally do not hold loan commitments and loans until maturity.

The objective of a fair value measurement is to estimate an exchange price for an asset or liability in the absence of actual transactions. The estimate is based on a hypothetical transaction between willing parties presumed to be market place participants representing unrelated buyers and sellers that have a common level of understanding about factors relevant to the asset or liability that are willing and able to participate in the same market that the asset would be traded in. Because fair value presumes the absence of compulsion or duress, prices derived from a forced liquidation or distress sale would not be used as the basis for the estimate. Fair value estimates use various market inputs. In an active market, quoted prices represent actual transactions that are readily and regularly available to provide pricing information on an ongoing basis. In determining whether a market is active, the emphasis is on the level of activity for a particular asset or liability. Inputs may be also used from other less active markets. Examples of market inputs that may be considered in a fair value measurement include, but are not limited to, quoted prices that are adjusted as appropriate, interest rates, default rates, prepayments, and liquidity.

<sup>&</sup>lt;sup>11</sup>FASB has defined a financial instrument as cash, evidence of an ownership interest in an entity, or a contract that both imposes on one entity a contractual obligation to (1) deliver cash or another financial instrument to a second entity or (2) exchange other financial instruments on potentially unfavorable terms with the second entity and conveys to that second entity a contractual right to (1) receive cash or another financial instrument from the first entity or (2) exchange other financial instruments on potentially favorable terms with the first entity.

We conducted our work in Charlotte, N.C.; New York City, N.Y.; Norwalk, Conn.; San Francisco, Calif.; and Washington, D.C., between November 2003 and October 2004, in accordance with generally accepted government auditing standards. (See app. I for more details on our objectives, scope, and methodology.)

### Results in Brief

In response to claims by some investment bankers that loan commitments were systematically underpriced, many commercial bankers, officials at rating agencies, and industry experts told us that price comparisons between loan commitments and loans are difficult because of fundamental differences in the purpose and structure of these financial instruments. For example, with a loan commitment, a company buys an option to borrow a certain amount in the future (under certain terms and conditions), with a loan, the company agrees to pay interest (as well as fees) in return for the funds a bank disburses. In addition, lenders typically charge fees for making credit available on a contingent basis under a loan commitment and an interest rate for loans, including the amounts drawn under a loan commitment. Commercial bankers said that they consider several factors when establishing the price of loan commitments and loans, including existing business relationships with the borrower, the borrower's creditworthiness, the price of the borrower's existing debt, the price of loans to similar borrowers, and financial models.

Officials at commercial banks, rating agencies, FASB, and loan pricing data firms told us that loan commitments were rarely traded in the secondary market. According to commercial bankers, trading was limited because banks make these commitments as part of their business relationship with borrowers and selling these loans could jeopardize these relationships. Officials at rating agencies told us that the trading in loan commitments was limited because institutional investors—significant participants in the secondary market—were reluctant to purchase instruments that might require funding in the future. Because loan commitments are rarely traded, secondary loan market trading data—which show that overall secondary loan market trading has increased—reflect trading activity predominately for loans. No comprehensive data are publicly available about the actual prices for either loans or loan commitments traded in the secondary market. Some investment bankers contended that certain loan commitments were underpriced, as evidenced by the sale of these commitments below face value shortly after origination. On the other hand, commercial bankers, credit rating agency officials, and other loan market participants told us that the secondary market for loan commitments was

illiquid and that commitments could sell at a discount when large amounts were brought to the market as a result of this illiquidity. Investment bankers acknowledged that loan commitments that sold at a discount in initial trading had current trading levels closer to face value. This increase in market value would have significantly reduced any initial loss to the investment banks and may indicate that the initial decline in value was in response to other market factors. The limited evidence from secondary trading of loan commitments cannot substantiate claims that loan commitments are underpriced.

We also did not find any comprehensive data to show the extent to which credit default swaps—essentially insurance against borrower default—are used to reduce the credit risk associated with loan commitments and loans. Further, officials from all six commercial banks we visited said that they used credit default swaps to reduce the credit risk only on small amounts of their loan and loan commitment portfolios. Officials at two investment banks we visited said that credit default swaps and loan commitments were similar enough such that inferences about the appropriateness of the price of loan commitments could be drawn from the prices of credit default swaps. However, we analyzed the characteristics of each instrument and found that it was not possible to use credit default swap prices to determine whether loan commitments were underpriced because of substantial differences between the two instruments.

Under current accounting standards, designed to reflect their respective business models, commercial and investment banks account for loan commitments differently. If commercial banks do not expect borrowers to exercise loan commitments, these banks generally recognize the revenue from these commitments in equal amounts over the life of the contract, or if the commitment is exercised, they recognize revenue over the life of the loan. Investment banks recognize changes in the fair value of loan commitments in income during the period when the changes occur. As a result, the potential volatility of these fair value changes is reflected more transparently in an investment bank's financial statements than in a commercial bank's financial statements. We also found that following different accounting rules may cause temporary differences in recognizing the fees from loan commitments. Further, we found that the revenue from loan commitments was relatively small compared with revenue from other bank operations. We did not find any evidence that the differences in accounting treatment offered commercial banks with a consistent competitive advantage over investment banks. Further, both commercial banks and investment banks have similar fair value footnote disclosure

requirements and generally provide similar information on their footnotes about the fair value of various financial instruments, including loan commitments. It appears that the economic substance of loan commitments is recognized in the financial statements and related footnotes in a clear, measurable, and evident fashion under both historic cost and fair value basis. We found that the banks included in the scope of this review used different methods to estimate the fair value of financial instruments and that the level of detail in their financial statement disclosures varied. However, all the financial statement disclosures we reviewed appeared to be in accordance with current accounting guidance, and we did not identify any objections to the disclosures by the banks' independent auditors.

While current accounting standards do not require fair value accounting for all financial instruments, a FASB staff member published an article indicating that fair value accounting may provide more relevant information about financial assets and liabilities, such as loan commitments, than information based on historical cost. This article stated that the mixed-attribute model cannot cope with today's complex financial instruments and risk management strategies and it is time for a better accounting model. However, FASB staff indicated that not all the conceptual and implementation issues related to fair value accounting have been resolved. For example, fair value accounting may focus too much on current market values that may not be relevant to a bank that has the intent and ability to hold the financial instrument until maturity. Further, in the absence of an active secondary market for loan commitments, estimating the fair value would be difficult, imprecise, and could be subject to manipulation. While FASB currently has projects underway to improve its fair value accounting guidance, overall progress in implementing fair value for all financial instruments has been limited, in part, by this controversy, the complex nature of developing detailed implementation guidance, and the limited secondary market for various types of financial instruments such as loan commitments. As a result, commercial banks and investment banks continue to follow different accounting models for similar financial instruments such as loan commitments.

We provided copies of this report to FDIC, OCC, and the Board of Governors of the Federal Reserve System. They provided technical comments, which we incorporated into the report as necessary. Differences in Purpose, Price Structure, and Collateral Requirements Make Direct Comparisons between Prices of Loan Commitments and Loans Difficult Although some investment bankers have contended that commercial banks systematically underprice loan commitments, commercial bankers and other industry observers told us that the different characteristics of loan commitments and loans—purpose, collateral requirements, and price structure—limited direct price comparisons. For example, a loan commitment gives a company the option to borrow in the future under certain terms and conditions, while a loan provides borrowers with actual funds. In addition, lenders typically charge fees for making credit available under a loan commitment and an interest rate for loans (including loans drawn under prior loan commitments). Commercial bankers said that they consider several factors when establishing the price of loan commitments and loans, including the profitability of the existing business relationship with the borrower, the maturity of the loan or loan commitment, the creditworthiness of the borrower, the price of loans to similar borrowers, the price of existing borrower debt, and financial models.

Loan Commitments and Loans Differ in Purpose, Price Structure, and Collateral Requirements

While both loan commitments and loans offer firms access to credit, these instruments serve different purposes. Investment-grade loan commitments are frequently used as backup lines of credit for borrowers that issue commercial paper. Commercial bankers and rating agencies told us that these lines are not expected to be drawn unless a firm loses access to the commercial paper market. Because—as we have indicated earlier—access to the commercial paper market is limited to companies with high credit ratings, loss of access to this market does not, by itself, mean that a firm that draws its loan commitment is in danger of defaulting. In most cases where investment-grade borrowers drew upon their loan commitments, they repaid the amount borrowed in full or otherwise performed in accordance with the repayment terms for the amount borrowed. In contrast to investment-grade borrowers, leveraged borrowers are expected to partially or fully draw down on their loan commitments. Funded loans are predominately used by leveraged borrowers that do not have access to lower cost credit in the commercial paper market. Loan commitments and loans also have different price structures, with lenders typically charging one or more fees for making credit available under a loan commitment and an interest rate on funded loans expressed as a spread or markup over a

benchmark rate. <sup>12</sup> Loan commitments and loans also differ in security. Loan commitments to investment-grade borrowers are typically unsecured—no collateral is pledged—and have few restrictive financial covenants, while leveraged loans are typically secured and have more covenants. <sup>13</sup> While a loan commitment gives a firm an option to borrow funds under prespecified terms, a loan actually provides these funds to the firm. These differences between the purpose of loan commitments and loans, together with differences in their price structure and collateral requirements, make it difficult to compare the price of loan commitments with loans.

## Commercial Banks Consider Several Factors to Price Loan Commitments and Loans

Commercial bankers said that they considered several factors in establishing the price of loan commitments and loans. For investmentgrade borrowers, the profitability of the banking relationship a bank has with the borrower was one factor. Commercial banks establish relationships with corporate customers and evaluate the overall profitability of these relationships in terms of the various products and services customers use and the prospects for additional business in the future. Commercial bankers said that the extent and profitability of the existing business they had with an investment-grade borrower would affect the decision to participate in a syndicated loan and the price they would set if they were syndicating the loan. As we previously reported, commercial bankers also told us that they considered the need to set a price that provided an attractive return to other investors in the syndication. For leveraged loans, industry experts told us that pricing depended on the riskiness of the transaction, but one commercial banker told us that customer relationships also played a role.

Creditworthiness—a measure of a borrower's ability to meet debt obligations—was another factor considered in establishing the price of loan commitments and loans. As table 1 shows, the average fees for investment-grade loan commitments were lower than for leveraged loan commitments between 1999 and 2003, which demonstrates that lenders charge higher fees for leveraged or more risky loan commitments. In addition, the lower average fees for investment-grade loan commitments

<sup>&</sup>lt;sup>12</sup>Lenders often use the London Inter Bank Offered Rate or LIBOR as the benchmark or reference rate on loans. LIBOR is the base interest rate paid on deposits between banks in the Eurodollar market.

 $<sup>^{13}</sup>$ Financial covenants are provisions that prohibit a borrower from taking actions that might impair the value of the lender's ability to collect the loan.

might reflect the fact that lenders generally do not anticipate having to provide the funds they have committed. Table 1 also shows that the average fees for investment-grade loan commitments increased around 16 percent between 1999 and 2003, while the average fees for leveraged loan commitments decreased around 2 percent during the same time period.

Table 1: Average Fees for Investment-Grade and Leveraged Loan Commitments, 1999-2003

(Fees in basis points)		
Year	Investment-Grade	Leveraged
1999	12.2	49.2
2000	11.8	49.6
2001	11.3	46.5
2002	12.8	48.0
2003	14.2	48.0

Source: Loan Pricing Corporation.

Note: The fee measures the amount the borrower pays for each dollar available under a commitment and adds the commitment and annual fees.

Table 2 shows the average annual charge over benchmark rate for investment-grade and leveraged loans between 1999 and 2003. Lenders also charge higher average annual charges over the benchmark rate for leveraged loans than for investment-grade loans, which reflects the greater risk of loss for leveraged loans. Between 1999 and 2003, the average annual charge over benchmark rate increased about 39 percent for investment-grade loans and around 13 percent for leveraged loans. However, in neither case could we determine whether the increase reflected overall higher charges for all loans or represented an increase in the proportion of riskier loans.

Table 2: Average Annual Charge Over Benchmark Rate for Investment-Grade and Leveraged Loans

(Charges in basis points)		
Year	Investment-Grade	Leveraged
1999	52.2	285.9
2000	51.6	294.3
2001	52.4	300.1
2002	61.7	315.7
2003	72.8	322.0

Source: Loan Pricing Corporation.

Note: The annual charge over benchmark rate adds the commitment and/or facility fee plus the interest premium.

Commercial bankers also told us that they considered the maturity of a loan commitment or loan in establishing the price of these instruments. As table 3 shows, the average fees for investment-grade loan commitments with maturities of 1 year or more were higher than for 364-day facilities, a reflection that the longer the maturity the greater the risk the loan will be drawn.

Table 3: Average Fees for Investment-Grade Loan Commitments—364-day facilities and Revolvers 1 year or More

(Fees in basis points)		
Year	364 day	1 year or more
1999	9.7	15.6
2000	10.0	14.1
2001	9.8	13.8
2002	10.7	16.0
2003	11.0	18.4

Source: Loan Pricing Corporation.

Note: The fee measures the amount the borrower pays for each dollar available under a commitment and adds the commitment and annual fees.

Commercial bankers also said that they took into account the recent prices of syndicated loans to borrowers with similar credit ratings, and the price of a corporation's bonds and other debt instruments. However, most commercial bankers we met with reported that they did not consider the

price of credit default swaps when determining the price of loan commitments. Further, commercial bankers told us that they used financial models to predict whether the price of a loan commitment or loan would meet their minimum profitability target. These models predict how a particular loan commitment will impact the risk and return of the institution's overall portfolio.

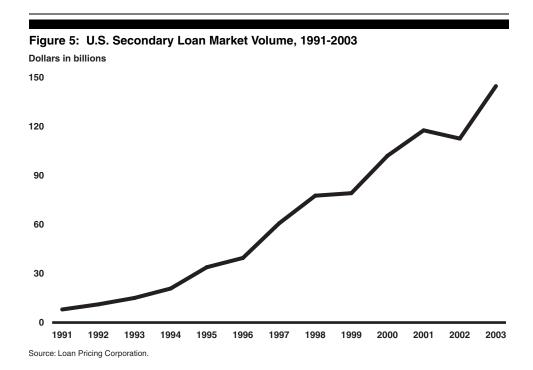
During our review, some investment bankers asserted that investment-grade loan commitments were not profitable on a stand-alone basis. Commercial bankers agreed that the price of these commitments was not very profitable on a stand-alone basis and that they generally look to the entire relationship with the customer to meet their profitability hurdles. Commercial bankers added that competition from other loan market participants constrained the prices they could charge, since investment-grade borrowers generally had syndication offers from more than one lender. When determining the price of investment-grade loans, some commercial bankers noted that competition limited their ability to raise fees and they described themselves as price "takers" rather than price "setters." Further, federal banking regulators told us that loan commitments are not legally required to be profitable on a stand-alone basis. 14

Loan Commitments
Are Rarely Traded, and
Available Data from
Secondary Market
Does Not Support
Claims of Systematic
Underpricing

We were told that loan commitments rarely trade in the secondary market, primarily for two reasons. First, commercial banks did not want to jeopardize their relationship with borrowers that might object to such a sale, and second, institutional investors—such as the mutual and hedge funds and insurance companies that are significant participants in the secondary market—were reluctant to buy instruments that might require funding in the future. Because loan commitments are rarely traded, the available data, which showed increases in secondary trading, were mostly for funded loans. Moreover, we found no comprehensive publicly available data about the actual prices of loans (or loan commitments) traded in the secondary market. For example, a loan pricing data firm compiles and makes some data publicly available about the volume of secondary loan market trading based on information solicited from key market participants.

<sup>&</sup>lt;sup>14</sup>Although there is no federal law that prohibits a bank from making an unprofitable loan commitment, a federal banking regulator might consider it an unsafe and unsound banking practice for a bank to engage in a systematically and consistently unprofitable business line.

As figure 5 shows, from 1991 to 2003, overall secondary loan market trading increased from about \$8 billion to about \$145 billion. Officials from a loan market trade association said that institutional investors, attracted by the higher returns provided by loans as compared to bond and equity instruments, largely contributed to the growth in secondary loan market trading. The officials added that the development of standardized loan trade documentation and other market practices also facilitated the growth in secondary loan market trading by improving market liquidity.



Loan market trade association officials also said that there were no comprehensive data publicly available about the actual prices for loan commitments or loans traded in the secondary market. Loans are privately placed based upon negotiated terms. As such, institutions that buy or sell these instruments are not required to report actual trade prices. For certain loans, the trade association independently compiles and makes publicly available data on dealer quotes. However, the officials noted that the dealer quotes do not represent actual trade prices or offers to trade; rather, they are estimates provided by bank loan traders. Because loan commitments rarely trade, similar dealer quote data are not collected for these instruments.

Some investment bankers contended that certain loan commitments were underpriced at origination, as evidenced by the price of these commitments in the secondary market. However, the available evidence we reviewed did not support the investment bankers' contentions. In one case, officials from one investment bank said that they participated in a revolving line of credit where the initial trading levels in the secondary market were between 89 and 92 cents on the dollar. They said that, in their opinion, this immediate decline in value implied an initial loss to the participants and was evidence that the credit had been underpriced at origination. Commercial bankers, credit rating agency officials, and other loan market participants told us that the secondary market for loan commitments was illiquid, compared with that for other securities. As a result of this illiquidity, officials from one commercial bank said that investors are able to buy loan commitments at a discount when large amounts of a syndicated loan are placed on the market. The officials added that these investors are often able to sell smaller amounts of these commitments at a later time for a higher price. Investment bank officials acknowledged that the trading levels for the revolving line of credit, which had sold for between 89 and 92 cents on the dollar, had risen to between about 97 and 98 cents on the dollar in the secondary market. Investment bankers provided information on 3 other cases where loan commitments that sold at a discount in initial trading had current trading levels of more than 99 cents on the dollar. This increase in market value would have significantly reduced any initial loss to the investment banks and may indicate that the initial decline in value was in response to other market factors and the commitments were not necessarily underpriced.

Although Commercial
Banks Use Credit
Default Swaps to
Reduce the Credit Risk
of Their Loan
Commitment and Loan
Portfolios, Prices of
These Instruments
Cannot Be Compared
Directly

While some commercial banks reported that they used credit default swaps to reduce the credit risk on their loan and loan commitment portfolios, only limited information was available on the extent of this practice. Officials at two investment banks believed that credit default swaps and loan commitments were similar instruments, but we found that credit default swaps and loan commitments were substantially different. Commercial bankers, loan market experts, officials from rating agencies, and other industry observers also agreed that credit default swaps and loan commitments were different financial instruments. Based on our analysis of the characteristics of credit default swaps and loan commitments, we found that it was not feasible to use credit default swap prices to determine whether loan commitments were underpriced because of the differences between the two instruments.

Comprehensive Data Are Not Available about the Use of Credit Default Swaps to Reduce Credit Risk As previously discussed, credit default swaps are essentially insurance against borrower default, and commercial banks and other financial institutions use these instruments to reduce or diversify credit risk exposures. Commercial banks are required to report the total amount of their credit default swap and other credit derivative contracts in quarterly reports submitted to federal banking regulators, but banks do not have to distinguish between amounts they hold to reduce credit risk and amounts they hold for trading purposes. Officials from the six commercial banks we visited said that they used credit derivatives to reduce the risk on between 2 and 12 percent of their loan and loan commitment portfolios and held most of these instruments for trading purposes–primarily customer service transactions. A credit rating agency report on credit default swaps reached a similar conclusion. <sup>15</sup>

## Credit Default Swaps and Loan Commitments Are Different Financial Instruments

Officials at two investment banks we visited said that credit default swaps and loan commitments were similar financial instruments. For example, officials at one investment bank said that credit default swaps and loan commitments were similar financial instruments because those who sold the protection offered by credit default swaps and those who made loan commitments were exposed to similar risks of credit losses. They added that a credit default swap and a loan commitment were both similar to a put option. In a put option, the option purchaser has the right, but not the obligation, to sell an asset to the put option seller at a specified price on or before the option's exercise date, and the purchaser pays a premium to the seller for the put option. The officials noted that if a swap was triggered by a credit event, the beneficiary had the right to payment of the swap's full value from the guarantor, who would then be exposed to any losses associated with the credit event. These officials asserted that the same risk existed in a loan commitment, because the borrower has the right to draw the full amount of the commitment and would not exercise this right unless its credit rating had deteriorated to near default levels and it could not raise funds in the financial markets.

However, we found that credit default swaps and loan commitments were substantially different. We analyzed the characteristics of each instrument and sought the opinions of commercial bankers and other industry

<sup>&</sup>lt;sup>15</sup>"Demystifying Bank's Use of Credit Derivatives," Standard and Poor's, December 8, 2003, p. 2.

observers. As table 4 shows, credit default swaps and loan commitments differed in terms of the trigger event, pricing, trading, and financial covenants. For example, the trigger for a credit default swap is a clearly defined indication of the borrower's credit impairment, which typically includes bankruptcy, insolvency, and delinquency, or may even result from a credit-rating downgrade. However, the trigger for a loan commitment does not necessarily indicate credit impairment on the part of the borrower. A loan commitment may serve as a backup for commercial paper, and the issuer may have to use the line for reasons other than impaired credit.<sup>16</sup> We also found differences in the payment schedule of credit default swaps and loan commitments. For credit default swaps, the beneficiary makes fixed payments—either on a quarterly or annual basis to the guarantor. For loan commitments, the fees that lenders charge typically vary based on the credit rating for investment grade borrowers and financial ratios for leveraged borrowers. As previously discussed, officials from commercial banks we visited reported holding most credit default swap contracts for trading purposes, but these same officials also noted that loan commitments were generally not traded. Finally, loan commitment contracts typically include financial covenants, or a series of restrictions that dictate, to varying degrees, how borrowers can operate and carry themselves. These covenants are designed to protect lenders against the borrower's potential future credit deterioration. Credit default swap contracts do not contain such financial covenants. Commercial bankers, loan market experts, officials from rating agencies, and other industry observers also agreed that credit default swaps and loan commitments were different financial instruments.

<sup>&</sup>lt;sup>16</sup>In 1998, Russia's declaration of a debt moratorium and the near failure of a large hedge fund created financial market turmoil; since this severely disrupted corporations' issuance of bonds and commercial paper, they drew on their loan commitments from banks.

Table 4: Characteristics of Credit Default Swaps and Loan Commitments

	Credit default swap	Loan commitment
Triggering events specified in contract	Credit impairment of the borrower—bankruptcy, insolvency, delinquency, or a credit-rating downgrade	Does not necessarily indicate credit impairment of the borrower
Payment schedule	Fixed-payments made per quarter or on annual basis	Variable—based on credit rating for investment grade borrowers, financial ratios for leveraged borrowers
Trading	Yes—most held for trading purposes	No—loan commitments generally not traded
Financial covenants	No	Yes

Source: GAO.

Commercial and Investment Bankers Disagreed about the Relationship between Credit Default Swap and Loan Commitment Prices

According to officials at the two investment banks we visited, credit default swap and loan commitment prices were similar enough to allow for meaningful price comparisons. However, as previously discussed, we found that credit default swaps and loan commitments were substantially different financial instruments. Commercial bankers and other loan market participants also told us that prices of the two financial instruments should not be directly compared without adjusting for differences between the instruments. For example, officials at one commercial bank told us that they first adjust for differences in financial covenant protection and recovery rates before using credit default swap prices in estimating the value of their total loan commitment portfolio. These officials also told us that the directional movements in credit default swap prices had informational value regarding the fair value of their loan commitment portfolio—that is, as credit default swap prices increased, the fair value of their loan commitments decreased. However, these officials cautioned that the adjusted prices for credit default swaps were likely to be different from the actual sales price of the portfolio if the instruments were to be sold. Because of substantial differences between credit default swaps and loan commitments, we found that it was not possible to use credit default swap prices to determine whether loan commitments were underpriced.

Commercial and
Investment Banks
Follow Different
Accounting Models,
but There Is No
Evidence That Either
Model Provides a
Consistent Competitive
Advantage

Under current accounting standards, designed to reflect their different business models, commercial and investment banks account for loan commitments differently. We found that following different accounting standards caused temporary differences in recognizing the fees from loan commitments. Further, we found that the revenue from loan commitments was relatively small compared with revenue from other bank operations and these differences would be resolved by the end of the commitment period. We did not find any evidence that the differences in accounting treatment offered the commercial banks with a consistent competitive advantage over investment banks. Further, both commercial and investment banks have similar fair value footnote disclosure requirements and generally provide similar information in their footnotes about the fair value of various financial instruments, including loan commitments. We found that the banks included in the scope of this review used similar methods to estimate the fair value of financial instruments and that the level of detail in their financial statement disclosures varied. However, all the financial statement disclosures we reviewed appeared to be in accordance with current accounting guidance, and we did not identify any objections to the disclosures by the banks' independent auditors.

Commercial and Investment Banks Follow Different Accounting Models but Have Similar Disclosure Requirements According to FASB, which sets the private sector accounting and reporting standards, commercial and investment banks follow different accounting standards for similar transactions involving loan commitments because of the differences in their business models. As previously discussed, most commercial banks use varying accounting models depending on the type of activity being accounted for—known as a mixed attribute model. With this model, some financial assets and liabilities are measured at historical cost, some assets at the lower of cost or market value, and some at fair value. In contrast, investment banks generally follow a fair value accounting model in which they report changes in the fair value of inventory, which may include loans or loan commitments, in income during the periods in which the changes occur.

FASB officials told us that many believe it is appropriate for commercial and investment banks to follow different accounting models because the institutions have different business models. For example, commercial banking activities have traditionally included accepting deposits, originating loans, and holding loans. These banks generally have the intent and ability to hold the vast majority of their loan commitments and loan portfolios until maturity and usually hold a relatively small amount of loans

for sale. Some commercial bankers told us that the mixed attribute model more closely reflects the commercial bank's operations than the fair value model. Investment bank activities have traditionally included buying, holding as inventory, and selling various financial instruments. As we previously reported in our October 2003 report on bank tying, investment banks often do not hold loan commitments until maturity. Officials at the two investment banks we spoke with stated that the fair value accounting model more closely reflects their operations than other models and asserted that this accounting model should be used by all banks.

When commercial banks make loan commitments, they must follow FASB's Statement of Financial Accounting Standards (FAS) No. 91, Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases, which directs them to book the fees received for loan commitments as deferred revenue (see app. II). The way this revenue is recognized depends upon the likelihood that the loan commitment will be exercised. When this likelihood is remote, the bank will recognize the revenue in equal portions over the loan commitment period. However, if it is likely that the commitment will be exercised, the bank will defer recognizing all the fee revenue for this commitment until the loan is drawn. The fee revenue from the commitment is then recognized over the life of the loan. If this loan commitment remains unexercised, the income would be recognized in total when the commitment period expired. Currently, commercial banks are not allowed to recognize changes in the fair value of loan commitments in their earnings.

Investment banks are generally required to follow the American Institute of Certified Public Accountants (AICPA) *Audit and Accounting Guide*, *Brokers and Dealers in Securities*, which directs them to record the fair value of loan commitments. When using the fair value model, investment banks must recognize, in income, gains or losses resulting from changes in the fair value of a financial instrument, such as a loan commitment, during the period the change occurs.

Although commercial and investment banks follow different models to account for loan commitments, both firms are subject to the same fair value footnote disclosure requirements in which they report the fair value of all loan commitments in their financial statement footnotes along with the method used to determine fair value. As a result, financial analysts and investors are presented with similar information about the commercial and investment banks' loan commitments in the financial statement footnotes. According to FAS 107: *Disclosures about Fair Value of Financial* 

Instruments, in the absence of a quoted market price, firms may estimate fair value based on, among other things, the value of (1) the quoted price of a financial instrument with similar characteristics, (2) option or matrix pricing models, or (3) the discounted value of future cash flows expected to be received.

As we previously reported in our October 2003 report on bank tying, Securities and Exchange Commission (SEC) officials and the banking regulators told us the footnote disclosures included with financial statements were an integral part of communicating risk. They considered the statement of position and statement of operations alone to be incomplete instruments through which to convey the risk of loan commitments. They emphasized that to fully ascertain a firm's financial standing, footnotes must be read along with the financial statements.

We found that the banks included in the scope of this review used similar methods to estimate the fair value of financial instruments and the level of detail in their financial statement disclosures varied. For example, all of the commercial bank footnotes we reviewed stated that fair values were based on quoted market prices, when available. If quoted market prices were not available, the banks used other methods such as internally developed models, or based their fair value estimates on the price of similar financial instruments. Some bank footnotes acknowledged that the fair values were significantly affected by assumptions used in developing the estimate, such as the timing of future cash flows and the discount rate, and further recognized that the estimated fair values would not necessarily be realized in an immediate sale of the financial instrument. For some of the commercial bank's footnotes that we reviewed, the fair value of loan commitments was not explicitly stated, apparently because these amounts may not have been material to the financial statements and therefore did not warrant separate disclosure. Despite the differences in the methods banks used to estimate the fair value of financial instruments and the level of detail presented, all of the financial statement disclosures appeared to be presented in accordance with current disclosure guidance. We found no instances of independent auditors' taking exception to these disclosures in the audit opinions.

As part of our review, we asked bank officials if, for various decisionmaking purposes, they assigned different values to their loan commitments than the values reported on the financial statements and related fair value footnotes. Four of the commercial banks included in our review and both investment banks included in our sample responded to our request for information and stated that they consistently used the same values for internal decision-making purposes that they used in their financial statements.

During our discussions of accounting disclosures, one investment bank official we spoke with asserted that the most appropriate method of determining the fair value of loan commitments and reporting these values in the financial statement footnotes was to use the value of a related credit default swap because this official viewed the two financial instruments as similar. FASB staff told us that generally accepted accounting principles do not prescribe a specific method to estimate the fair value of financial instruments that could be universally adopted by all banks. While the price of a credit default swap could be used under current accounting guidance as the market price of similar traded financial instruments with a similar credit rating, interest rate, and maturity date, this was only one possible method. Some of the other possible methods of estimating the fair value of a financial instrument that does not regularly trade include option pricing models or estimates based on the discounted value of future cash flows expected to be received. Moreover, commercial bank officials and FASB staff told us that a credit default swap did not exist for every borrower that had a loan commitment. As previously discussed, the price of the credit default swap would likely need to be adjusted to account for the various other differences between it and a loan commitment. One commercial bank that we spoke with used credit default swaps as a basis for estimating the fair value of their loan commitments. However, officials at this bank stated that they first adjusted the swap price for the various differences between the two financial instruments, cautioned that the resulting estimate was unlikely to represent the actual sales price of the loan commitments, and primarily used the adjusted credit default swap price to assess directional changes in the estimated fair value of their loan commitment portfolio.

No Evidence That Accounting for Loan Commitments Gives Commercial Banks a Consistent Competitive Advantage over Investment Banks Because commercial and investment banks follow different accounting models, they would likely report different values for a similar loan commitment or a loan resulting from an exercised commitment, and recognize different amounts of the related deferred revenue. Further, revenue from fee income would be relatively small compared with revenue from other bank activity. In addition, because investment banks use fair value accounting, the volatility of the fair value of loan commitments would be reflected more transparently in their financial statements than a commercial bank's financial statements, because investment banks must recognize these changes in income as they occur. In contrast, commercial

banks do not recognize changes in the fair value of the loan commitment, its related deferred revenue, or the related loan if it were drawn.

The differences in accounting between commercial banks and investment banks are temporary, and, as demonstrated by the examples in appendix II, whether a commercial bank or an investment bank recognizes more fee revenue first would depend on various market conditions including interest rates and spreads. Similarly, any differences between the fair value of a loan or loan commitment on an investment bank's books and the net book value of a similar loan or loan commitment on a commercial bank's books would be eliminated by the end of the loan term or commitment period. 17 Moreover, based on our review of the banks' financial statements, we found that the revenue commercial banks earn from loan commitments was apparently relatively minor compared with other sources of revenue, since it was not identified separately in the statement of income as source of income. 18 Thus, differences in the amount and timing of recognizing service fee income would likely be relatively small. Further, as previously discussed, both commercial and investment banks are required to make similar footnote disclosures about the fair value of their financial instruments. Because these differences are relatively small and temporary, we found no evidence that following different accounting models provided the commercial banks with a consistent competitive advantage over investment banks.

In addition, certain similarities in investment and commercial banks' accounting treatment of loan commitments help mitigate any advantage one type of accounting may offer over the other. First, as previously discussed, both commercial and investment banks are required to make similar footnote disclosures about the fair value of their financial instruments. Second, when similar loan commitments held by a commercial bank and an investment bank are exercised and become loans,

 $<sup>^{17}</sup>$ The net book value of a loan is generally its unpaid principal balance less any allowance for credit losses.

<sup>&</sup>lt;sup>18</sup>In determining what information to specifically identify in the financial statements, auditors and those making accounting decisions often try to determine whether an item is large enough for users of the information to be influenced by it. If not, the information may be included with other financial statement line items. None of the banks we reviewed identified service fees from loan commitments as a separate line item, indicating that the amounts were relatively small and that financial statement users would not be mislead by omitting these data. Further, none of the independent auditors take exception to this presentation.

both firms are subject to the same accounting standards if the loan is held to maturity. In this situation, both commercial and investment banks are required to establish an allowance for probable losses based on the estimated degree of impairment of the loan commitment or historic experience with similar borrowers.<sup>19</sup>

Fair Value Accounting May Have Certain Advantages, but Significant Implementation Issues Must Still Be Resolved While current accounting standards do not require fair value accounting for all financial instruments, FASB has recognized that commercial and investment banks engage in similar transactions and the board is concerned about having different accounting for those similar transactions. As new accounting guidance is issued, the board is considering eliminating the different business models where appropriate and has indicated a desire to require all entities to report all financial instruments at their current fair value where the conceptual and practical issues related to fair value measurement have been resolved. As we reported in our October 2003 report on bank tying, FASB has stated that it is committed to work diligently toward resolving, in a timely manner, the conceptual and practical issues related to determining the fair values of financial instruments.

An FASB staff member wrote a paper that summarized the strengths and weaknesses of fair value accounting. <sup>20</sup> In that paper, the staff member stated that fair value measurement for financial assets and liabilities, such as loans and loan commitments, provide more relevant information than the historical cost model. The author also wrote that the mixed-attribute model cannot cope with today's complex financial instruments and risk management strategies and it is time for a better accounting model. In

<sup>&</sup>lt;sup>19</sup>According to FAS 114: Accounting by Creditors for Impairment of a Loan, a loan is considered impaired when, based on current information and events, it is probable that a creditor will be unable to collect all amounts due according to the contractual terms of the loan agreement. To comply with FAS 114, creditors must create a valuation allowance that reduces the value of the loan with a corresponding charge to a bad-debt expense. FAS 114 has a limited scope and applies only to loans that have been identified for evaluation for collectibility. When a loan is not impaired under FAS 114, creditors must follow FAS 5: Accounting for Contingencies and establish an allowance for loss when it is probable that a loss or an additional loss has been incurred and the amount of the loss can be reasonably estimated.

<sup>&</sup>lt;sup>20</sup>FASB Viewpoints Financial Assets and Liabilities—Fair Value or Historical Cost? Diana Willis, August 18, 1998. The views in this paper were those of the author and did not reflect official positions of the FASB, which are determined only after extensive due process and deliberation.

addition, the article stated that under the mixed-attribute model, few financial liabilities, such as deposit accounts, are measured at fair value, which can misrepresent the financial position of an entity that has a significant amount of financial liabilities. The paper further stated that changes in the economic environment during the past 20 years have increased the volatility of prices such as interest rates and the introduction of derivatives and other complex financial instruments have made the issue of how to measure financial instruments critical. According to the author, a market price of a financial instrument reflects the market's assessment of the future cash flows that this instrument will provide under current conditions and an assessment of the risk that the amount or timing of these cash flows will differ from expectations. The article also stated that investors and creditors are primarily interested in assessing the amounts, timing, and uncertainty of future net cash inflows to an entity and, according to FASB staff, it seems logical that information based on the market's assessment, under current conditions, would be more relevant to investors and creditors. Moreover, the FASB staff paper noted that in today's highly fluid economic environment, significant changes often occur in short periods of time. These changes may influence management's decision to hold a particular financial instrument to maturity or sell it and invest the proceeds elsewhere. The FASB staff concluded that the effects of these decisions might be important to investors' and creditors' evaluation of the entities' performance.

Officials at both investment banks that we spoke with asserted that accounting for loan commitments on a fair value basis was better than the mixed-attribute model that commercial banks use. Officials at one of these investment banks stated that the current accounting requirements created a disincentive for commercial banks to disclose the risks associated with loan commitments and their fair value. This investment bank official also stated that fair value accounting forces business discipline and asserted that commercial banks should not continue to reflect a loan commitment on their financial statements at a value exceeding its current fair value.

According to the FASB staff paper, while most people agree that fair value is the most relevant measure for assets and liabilities that are actively traded, some believe applying this accounting model to all financial instruments may focus too much on current market information that does not necessarily reflect management's intentions. The author noted that implementing fair value accounting that focuses on current market prices for all financial instruments would reflect the effects of transactions and events in which the entity did not directly participate. The author further

stated that some have indicated that if management has the intent and ability to hold a financial asset or liability until maturity, the current market price is less relevant than if they were actively considering selling the instrument. Further, the FASB staff paper points out that opponents of the fair value model assert that the effects of management's decisions to hold or sell a particular financial instrument should become apparent over time as the entity reports earnings that are higher or lower than the current market. Thus, the current mixed-attribute model seems to provide information that may be important to investors and creditors evaluation of the entities' performance.

The rating agency officials that we spoke with told us that they were comfortable with both historical cost and fair value accounting and could work equally well with either type of accounting information. These officials told us that the information in the bank's financial statement footnotes provided enough information to assess a bank's financial performance over time. In our October 2003 report on bank tying, we reported that a loan market expert told us that, although the discipline of using market-based measures works well for some companies, fair value accounting might not be the appropriate model for the entire wholesale loan industry.

FASB staff that we spoke with acknowledged that progress in implementing fair value accounting for all financial instruments has not been required because all the implementation issues have not yet been resolved. In our October 2003 report on bank tying, we reported that FASB staff told us that, although measuring financial instruments at fair value has conceptual advantages, FASB has not yet decided when, if ever, it will require essentially all financial instruments held in inventory to be reported at fair value. FASB staff stated that it was important to carefully evaluate all aspects of fair value measurement to avoid unintended consequences. For example, in the absence of observable market data, such as the secondary market for loan commitments, an estimate of fair value would require significant judgment and the result would be imprecise. FASB staff stated that many constituents have expressed concerns that estimating fair value without an active market is too subjective and there is potential for management to manipulate the fair value of these financial instruments because of the significant level of discretion involved in choosing the assumptions that may be used to estimate fair value. As a result, the amount of revenue or losses from changes in the fair value that banks would report could be unreliable.

Another significant issue that has not been resolved is the elimination of the banks' allowance for loan losses account. This allowance account is essentially an estimate of the amount of probable loss in a bank's loan portfolio. FASB staff told us that eliminating the allowance for loan losses is currently a controversial issue among commercial banks and the bank regulators who want to maintain the current accounting model. FASB staff also told us that commercial banks have asserted that the mixed attribute model more accurately reflects their operations than fair value accounting. FASB staff told us that the bank regulators use the allowance for loan losses as one of several factors that are considered in assessing a bank's asset quality. As discussed previously, under fair value accounting, all financial instruments would be carried at a market price that reflects the market's assessment of the future cash flows this instrument will provide under current conditions and an assessment of the risk that the amount or timing of these cash flows will differ from expectations. While market values for some portions of banks' loan portfolios may be readily obtained, such as residential mortgages where there is an active secondary market, other segments of some banks' portfolios, including loans to small and medium--sized businesses, are more unique and obtaining reliable fair values could be more problematic. As previously discussed, fair value estimates of these loans would require a significant amount of management judgment and the results would likely be imprecise. Until these issues have been resolved and more comprehensive guidance has been issued by FASB, the current mixed-attribute model will likely continue to be used by some entities while others use fair value.

# FASB Plans to Revise Fair Value Accounting Guidance

According to the FASB staff that we spoke with, the board is taking steps to improve the accounting guidance for fair value measurements and, on June 23, 2004, issued an exposure draft regarding fair value measurements. <sup>21</sup> Prior to issuing this exposure draft, FASB noted that there was limited guidance for measuring assets and liabilities on a fair value basis and this guidance was dispersed among several accounting pronouncements. Differences in this guidance created inconsistencies, and concerns were raised about the ability to reliably estimate fair value, especially in the absence of quoted market prices.

<sup>&</sup>lt;sup>21</sup>Financial Accounting Standards Board Exposure Draft Proposed Statement of Financial Accounting Standards Fair Value Measurements (June 23, 2004).

This exposure draft includes guidance that investment banks would follow to determine the fair value of loan commitments. Further, the exposure draft provides guidance that both commercial and investment banks would follow in determining the fair value of loan commitments and presenting this information in their footnote disclosures including the extent of fair value measurement, how fair value was determined, the amount of unrealized gains/losses, and the extent of market inputs that were used. In addition, the exposure draft provides examples of the financial statement footnotes to encourage more consistency in presentation. The exposure draft, among other things, also clarifies the definition of fair value and provides guidance on the hierarchy of techniques that can be used to determine fair value. FASB is currently re-deliberating the exposure draft and considering comments received from constituents during the comment period. According to FASB staff members, they expect to release the final guidance during the first half of 2005.

FASB staff told us that they had other projects under way that could affect how commercial and investment banks account for loan commitments including revising revenue recognition guidelines and coordinating with the International Accounting Standards Board in an attempt to eliminate differences in accounting standards. In addition, FASB staff is also looking at the relevance and reliability of some attributes used to estimate fair value. The goal of this effort is to provide guidance for determining at what point an estimate becomes too unreliable to be reported in the financial statements.

### Conclusions

Although some investment bankers have contended that commercial banks systematically underprice loan commitments, the available evidence did not support these contentions. Because of fundamental differences in the purpose and structure of loan commitments and loans, commercial bankers, officials at credit-rating agencies, and other industry experts told us that price comparisons between these financial instruments are difficult. In addition, the evidence we reviewed from the secondary loan market did not indicate underpricing of loan commitments. In cases we reviewed where loan commitments had traded at a discount in initial trading, the same commitments had current trading levels closer to face value, which may indicate that the commitments were not necessarily underpriced. Further, because of the substantial differences between loan commitments and credit default swaps, it was not possible to use credit default swap prices to determine whether loan commitments were underpriced.

Because commercial and investment banks currently follow different accounting standards, designed to reflect their different business models, there are differences in the financial statement presentation of some similar transactions such as loan commitments. Unlike commercial banks. investment banks recognize changes in the fair value of loan commitments in income during the period when the changes occur. As a result, the volatility of these fair value changes is reflected more transparently in an investment bank's financial statements. We found that following different accounting rules caused temporary differences in recognizing the fees from loan commitments. We also found that revenue from loan commitment fees appeared to be relatively small compared with revenue from other bank activity. We did not find any evidence that the differences in accounting treatment offered the commercial banks a consistent competitive advantage over investment banks. It appears that the economic substance of loan commitments is recognized in the financial statements and related footnotes in a clear, measurable, and evident fashion under both the historic cost and fair value accounting approach. Further, both commercial and investment banks have similar fair value disclosure requirements and generally provide similar information on their financial statements about the fair value of various financial instruments, including loan commitments. Although one FASB staff member indicated that fair value accounting may offer advantages over the mixed-attribute model, in some instances, such as providing more relevant information than the historical cost model, significant implementation issues must be resolved before it can be applied to all financial instruments. It is important for FASB to continue working diligently toward resolving these issues to help ensure that financial statement users are provided with the most relevant and reliable financial information and to keep pace with today's financial markets. Until these issues are resolved, commercial and investment banks will continue to follow different accounting models for similar financial instruments such as loan commitments.

### **Agency Comments**

We requested comments on a draft of this report from FDIC, Federal Reserve, OCC, and SEC. FDIC, Federal Reserve, OCC, and SEC staff provided technical suggestions and corrections that we have incorporated where appropriate.

We will provide copies of this report to the appropriate congressional committees. In addition, the report will be available at no charge on the GAO Web site at <a href="http://www.gao.gov">http://www.gao.gov</a>.

If you or your staffs have any questions about this report, please contact me at (202) 512-8678 or hillmanr@gao.gov or Daniel Blair, Assistant Director at (202) 512-9401 or blaird@gao.gov.

Level J.H. III.

Richard Hillman, Director

Financial Markets and

Community Investment

## Objectives, Scope, and Methodology

During our review, we sought the perspectives of commercial banks that were significant participants in the syndicated loan market. Officials from six large commercial banks agreed to meet with us as part our review. In 2003, these banks arranged about 67 percent of total U.S. syndicated loan volume. We also interviewed officials from two investment banks to obtain the perspectives of other loan market participants.

To determine the differences between the price of loan commitments and loans, we examined data on loan commitments and loans compiled by a loan pricing data firm, analyzed the various characteristics of each instrument, and reviewed other financial literature related to the syndicated loan market. We also discussed the price of loan commitments and loans with commercial banks, investment banks, federal bank regulators, officials from credit rating agencies, officials from a loan pricing data firm and loan market trade association, and other industry observers.

To determine what data were publicly available about the trading of loan commitments, we analyzed data on secondary loan market trading compiled by a loan pricing data firm and reviewed other financial literature related to secondary loan market trading. We also interviewed commercial bankers, investment bankers, and officials from a loan pricing data firm and loan market trade association to obtain their perspectives on secondary loan market trading. In addition, we discussed the trading of loan commitments with federal bank regulators, officials from credit rating agencies, and other industry observers.

To determine the extent to which credit default swaps were used to reduce the risk of loan commitments, the similarities and differences between credit default swaps and loan commitments, and what, if anything, the prices of credit default swaps indicate about the prices of loan commitments, we analyzed data on credit default swaps compiled by federal banking regulators and a global trade association for derivatives and reviewed the financial statements of the 6 commercial banks for information on credit default swap usage. We also interviewed commercial bankers and investment bankers to obtain their perspective. In addition, we discussed the use of credit default swaps by commercial banks with federal bank regulators, officials from a global trade association for derivatives, officials from credit rating agencies, officials from a loan market data collection firm and trade association, and other industry observers.

<sup>&</sup>lt;sup>1</sup>Based on Loan Pricing Corporation 2003 U.S. Syndicated Loan League Table.

Appendix I Objectives, Scope, and Methodology

To determine whether the differences between commercial and investment bank's accounting for loan commitments provide either firm with a consistent competitive advantage, we reviewed our previous comparative analysis of applicable accounting standards. We also updated our understanding of the accounting standards for loan commitments through interviews with officials from the Financial Accounting Standards Board (FASB). In addition, we obtained the perspectives of commercial bankers, investment bankers, federal banking regulators, officials from credit rating agencies, and other industry observers regarding the current accounting standards for loan commitments.

To determine the strengths and weaknesses of fair value accounting, and the projects that FASB has under way that might change the way commercial and investment banks account for loan commitments, we reviewed a recently issued accounting exposure draft and conducted interviews with officials from FASB. We also discussed the merits of fair value accounting in interviews with commercial bankers, investment bankers, federal banking regulators, officials from credit rating agencies, officials from a loan market data collection firm and trade association and other industry observers.

We assessed all data for reliability and found them to be sufficiently reliable for the purposes of our reporting objectives. We conducted our work in Charlotte, N.C.; New York City, N.Y.; Norwalk, Conn.; San Francisco, Calif.; and Washington, D.C., between November 2003 and October 2004, in accordance with generally accepted government auditing standards.

Because commercial and investment banks follow different accounting models, there are differences in the financial statement presentation of some similar transactions. This appendix summarizes the differences, under generally accepted accounting principles in how commercial banks and investment banks account for loan commitments—specifically commercial paper back-up credit facilities—using hypothetical scenarios to illustrate how these differences could affect the financial statements of a commercial and investment bank. We use three hypothetical scenarios to illustrate the accounting differences that would occur between the commercial and investment banks for similar transactions if (1) a loan commitment were made, (2) the loan commitment was exercised by the borrower and the loan was actually made, and (3) the loan was subsequently sold. This appendix does not assess the differences in accounting that would occur between a commercial and investment bank if one entity decided to hold a loan to maturity while the other had the loan held for sale because these are not similar transactions.

The examples in this appendix demonstrate that, as of a given financial statement reporting date, differences would likely exist between commercial and investment banks in the reported value of a loan commitment and a loan resulting from an exercised commitment, as well as the recognition of the related deferred revenue. In addition, the volatility of the fair value of loan commitments and the related loan, if the commitment were exercised, would be reflected more transparently in an investment bank's financial statements, because an investment bank must recognize these changes in value in earnings as they occur in net income.<sup>2</sup> In contrast, commercial banks are not allowed to recognize changes in the fair value of the loan commitment, its related deferred revenue, or the related loan (if drawn and held to maturity). The differences in accounting between commercial banks and investment banks are temporary, and, as the examples in the following sections show, whether a commercial bank or an investment bank recognizes more fee revenue first would depend on various market conditions including interest rates and spreads. Similarly,

<sup>&</sup>lt;sup>1</sup>Commercial paper is generally a short-term unsecured money market obligation issued by prime rated commercial firms and financial companies. A commercial paper back-up facility is generally a short-term bank line of credit that serves as an alternate source of liquidity for an issuer of commercial paper lasting less than 1 year.

<sup>&</sup>lt;sup>2</sup>FASB has defined fair value in SFAS 107, *Disclosures about Fair Value of Financial Instruments*, as the amount at which a financial instrument could be exchanged in a current transaction between willing parties, other than a forced liquidation sale.

any differences between the fair value of a loan or loan commitment on an investment bank's books and the net book value of a similar loan or loan commitment on a commercial bank's books would be eliminated by the end of the loan term or commitment period. Further, both commercial and investment banks are required to make similar footnote disclosures about the fair value of their financial instruments. Thus, neither accounting model provides a clear and consistent advantage over the life of the loan commitment or the loan if the commitment were exercised.

#### Background

Since 1973, the Financial Accounting Standards Board (FASB) has been establishing private sector financial accounting and reporting standards. In addition, the American Institute of Certified Public Accountants (AICPA) Accounting Standards Executive Committee also provides industry-specific authoritative guidance that is cleared with FASB prior to publication. Where FASB guidance is nonexistent, as is currently the case in fair-value accounting for loan commitments, firms are required to follow AICPA guidance.

Most commercial banks generally follow a mixed-attribute accounting model, where some financial assets and liabilities are measured at historical cost, some at the lower of cost or market value, and some at fair value. In accounting for loan commitments, banks follow the guidance in Statement of Financial Accounting Standards (SFAS) Number 91, Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases. <sup>4</sup> Broker-dealer affiliates and investment banks whose primary business is to act as a broker-dealer follow the AICPA's Audit and Accounting Guide, Brokers and Dealers in Securities, where the inventory (that may include loan commitments) are recorded at the current fair value and the change in

<sup>&</sup>lt;sup>3</sup>The net book value of a loan is generally its unpaid principal balance less any allowance for credit losses.

<sup>&</sup>lt;sup>4</sup>SFAS 91applies to loan commitments held by lending institutions. If a commercial bank held a loan commitment in a broker-dealer affiliate registered with the Securities and Exchange Commission, the affiliate would follow the AICPA guidance for broker-dealers.

value from the prior period is recognized in net income.<sup>5</sup> Further, FASB currently has a project on revenue recognition that includes, among other things, the accounting for loan commitment fees by investment banks and others. The purpose of that project includes addressing the inconsistent recognition of commitment fee income and may eliminate some of the accounting differences that exist between commercial and investment banks described in this appendix.

FASB has stated that it is committed to work diligently toward resolving, in a timely manner, the conceptual and practical issues related to determining the fair values of financial instruments and portfolios of financial instruments. Further, FASB has stated that while measurement at fair value has conceptual advantages, all implementation issues have not vet been resolved, and the Board has not yet decided when, if ever, it will be feasible to require essentially all financial instruments to be reported at fair value in the basic financial statements. Although FASB has not yet issued comprehensive guidance on fair-value accounting, recent literature has stated that the fair-value accounting model provides more relevant information about financial assets and liabilities and can keep up with today's complex financial instruments better than the historical cost accounting model. The effect of the fair-value accounting model is to recognize in net income during the current accounting period amounts that, under the historical cost model, would have been referred to as unrealized gains or losses because the bank did not sell or otherwise dispose of the financial instrument. Further, proponents of the fair-value accounting model contend that unrealized gains and losses on financial instruments are actually lost opportunities as of a specific date to realize a gain or loss by selling or settling a financial instrument at a current price. On the other hand, a disadvantage of fair value accounting exists when there is not an active market for the financial instrument being valued. In

<sup>&</sup>lt;sup>5</sup>For simplicity, in this appendix the term investment bank will be used to mean an investment bank in which the broker-dealer comprises a majority of the financial activity. In practice, investment banks do not often hold loan commitments in their broker-dealer affiliates because of the high capital requirements of broker-dealers; rather, the investment bank would generally hold these financial instruments in a nonbroker-dealer affiliate. However, according to AICPA staff, at the consolidated level, the entity would retain the specialized accounting model used for the broker-dealer subsidiary. The commercial bank would continue to use SFAS 91 to account for its loan commitments. A nonbroker-dealer that is a subsidiary of a broker-dealer holding company (not a bank holding company) may also follow the accounting used by its broker-dealer subsidiary, if the broker-dealer comprises the majority of the financial activity of the consolidated entity; that is, the fair-value model would also be used for the consolidated broker-dealer holding company financial statements.

this case, the fair value is more subjective and is often determined either by various modeling techniques, based on the discounted value of expected future cash flows, or based on the value of credit derivatives.

#### Hypothetical Scenario for Unexercised Loan Commitments

On the first day of an accounting period, Commercial Bank A and Investment Bank B each made a \$100 million loan commitment to a highly rated company to back up a commercial paper issuance. This loan commitment was irrevocable and would expire at the end of three quarterly accounting periods. Because the loan commitment was issued to a highly rated company, both banks determined that the chance of the company drawing on the facility was remote. Both banks received \$10,000 in fees for these loan commitments. Commercial Bank A followed the guidance in SFAS No. 91 and recorded this transaction on a historical cost basis, while Investment Bank B, subject to specialized accounting principles that require fair-value accounting, reported changes in fair value included the effect of these changes in earnings.

## Revenue Recognition for the Commercial Bank

Upon receipt of the loan commitment fee, Commercial Bank A would record the \$10,000 as a liability, called deferred revenue, because the bank would be obligated to perform services in the future in order to "earn" this revenue. In practice, because of the relatively small or immaterial amounts of deferred revenue compared with other liabilities on a bank's statement of position (balance sheet), this amount would not be reported separately and would likely be included in a line item called "other liabilities." Commercial Bank A would follow the accounting requirements of SFAS No. 91 and recognize the revenue as service fee income in equal portions over the commitment period, regardless of market conditions—a practice often referred to as revenue recognition on a straight-line basis. Thus, at the end of the first accounting period, Commercial Bank A would reduce the \$10,000 deferred revenue on its statement of position (balance sheet) by one-third or \$3,333 and record the same amount of service fee revenue on the statement of operations (income statement). The same accounting would occur at the end of the second and third accounting periods, so that an equal portion of service revenue would have been recognized during each period that the bank was obligated to loan the highly rated company

<sup>&</sup>lt;sup>6</sup>The concept of materiality is discussed at length in FASB's Concept Statement 2, *Qualitative Characteristics of Accounting Information*, paragraphs 123 – 132.

\$100 million. Commercial Bank A would not report the value of the loan commitment on its balance sheet. However, the bank would disclose in the footnotes to its financial statements the fair value of this commercial paper back-up facility as well as the method used to estimate the fair value.

## Revenue Recognition for the Investment Bank

Although AICPA's Audit and Accounting Guide, Brokers and Dealers in Securities does not provide explicit guidance for how Investment Bank B would account for this specific transaction, the guide provides relevant guidance on accounting for loan commitments in general. This guide states that Investment Bank B would account for inventory, including financial instruments such as a commercial paper back-up facility, at fair value and report changes in the fair value of the loan commitment in earnings. When changes occurred in the fair value of the loan commitment, Investment Bank B would need to recognize these differences by adjusting the balance of the deferred revenue account to equal the new fair value of the loan commitment. Generally, quoted market prices of identical or similar instruments, if available, are the best evidence of the fair value of financial instruments. If quoted market prices are not available, as is often the case with loan commitments, management's best estimate of fair value may be based on the quoted market price of an instrument with similar characteristics or may be developed by using certain valuation techniques such as estimated future cash flows using a discount rate commensurate with the risk involved, option pricing models, or matrix pricing models. A corresponding entry of identical value would be made to revenue during the period in which the change in fair value occurred. Once the commitment period ended, as described in the previous paragraph, the deferred revenue account would be eliminated and the entire balance recorded as income because the fair value of the expired loan commitment is zero.

If market conditions changed shortly after Investment Bank B issued this credit facility and its fair value declined by 20 percent to \$8,000, Investment Bank B would reduce the deferred revenue account on its statement of position (balance sheet) to \$8,000, the new fair value. Investment Bank B

<sup>&</sup>lt;sup>7</sup>If the likelihood of exercising this commitment had not been remote, Commercial Bank A would have followed the requirements of SFAS 91, and not amortized the deferred revenue until the commitment was exercised. Once exercised, the bank would recognize the fee income over the life of the loan. If the commitment remained unexercised, income would be recognized upon expiration of the commitment.

<sup>&</sup>lt;sup>8</sup>This is required by SFAS No. 107, Disclosures about Fair Value of Financial Instruments.

would recognize \$2,000 of service fee income, the amount of the change in value from the last reporting period, in its statement of operations (income statement). Investment Bank B would also disclose in its footnotes the fair value of this credit facility, as well as the method used to estimate the fair value.

If during the second accounting period there was another change in market conditions and the value of this credit facility declined another 5 percent to \$7,500, Investment Bank B would decrease the balance in the deferred revenue account to \$7,500 and recognize \$500 in service fee revenue. Further, Investment Bank B would disclose in its footnotes the fair value of this credit facility.

During the accounting period in which the commitment to lend \$100 million was due to expire, accounting period 3 in this example, the balance of the deferred revenue account would be recognized because the commitment period had expired and the fair value would be zero. Thus, \$7,500 would be recognized in revenue and the balance of deferred revenue account eliminated. In this accounting period, there would be no disclosure about the fair value of the credit facility.

Differences in Revenue Recognition are Temporary

Table 5 summarizes the amount of revenue Commercial Bank A and Investment Bank B would recognize and the balance of the deferred revenue account for each of the three accounting periods when there were changes in the value of the loan commitments. Commercial Bank A would recognize more service fee income in accounting periods 1 and 2 than Investment Bank B. However, this situation would be reversed in period 3, when Investment Bank B would recognize more revenue. Thus, differences in the value of the loan commitment and the amount of revenue recognized would likely exist between specific accounting periods, reflecting the volatility of the financial markets more transparently in Investment B's financial statements. The magnitude of the difference is determined by the market conditions at the time and could be significant or minor. However, these differences would be resolved by the end of the commitment period, when both entities would have recognized the same amount of total revenue for the loan commitment.

**Table 5: Accounting Differences for a Loan Commitment** 

	Commercial Bank A		Investment Bank B	
Accounting period	Service-fee revenue recognized	Balance of deferred revenue	Service-fee revenue recognized	Balance of deferred revenue
Initial recording of the credit				
facility	\$0	\$10,000	\$0	\$10,000
1	3,333	6,667	2,000	8,000
2	3,333	3,334	500	7,500
3	3,334	0	7,500	0
Total service- fee revenue recognized	\$10,000		\$10,000	

Source: GAO

#### Hypothetical Scenario for Exercised Loan Commitments

Commercial Bank A and Investment Bank B issued the same loan commitment described previously. However, at the end of the second accounting period, the highly rated company exercised its right to borrow the \$100 million. The accounting treatment for this loan would depend upon whether the banks intended to hold or sell the loan. In practice, this loan could be either held or sold, and as a result, the accounting for both is summarized in the following sections.

#### Loans Held to Maturity

At the time the loan was made, Commercial Bank A would record the loan as an asset on its statement of position (balance sheet) at its principal amount less the balance of the deferred revenue account (\$100 million - \$3,334). Investment Bank B would initially record this loan at its historical cost basis, less the loan commitment's fair value at the time the loan was drawn (\$100 million - \$7,500). Further, based on an analysis by the banks' loan review teams, a determination of "impairment" would be made. According to SFAS 114, Accounting by Creditors for Impairment of a Loan, "a loan is impaired when, based on current information and events, it is probable that a creditor will be unable to collect all amounts due according to the contractual terms of the loan agreement." If the loan were determined to be impaired, SFAS 114 states that, the bank would measure the amount of impairment based on the present value of expected future cash flows discounted at the loan's effective interest rate, except that as a practical expedient, the amount of impairment may be based on the loan's

observable market price, or the fair value of the collateral if the loan were collateral dependent.

SFAS 114 directs both banks to establish an allowance for losses when the measure of the impaired loan is less than the recorded investment in the loan (including accrued interest, net of deferred loan fees or costs and unamortized premium or discount) by creating a valuation allowance that reduces the recorded value of the loan with a corresponding charge to baddebt expense. When there are significant changes in the amount or timing of the expected future cash flows from this loan, the banks would need to adjust, up or down, the loan loss allowance as appropriate so that the net balance of the loan reflects management's best estimate of the loan's cash flows. However, the net value of the loan cannot exceed the recorded investment in the loan.

If the loan were not impaired under FAS 114, both banks would still record an allowance for credit losses in accordance with FAS 5, *Accounting for Contingencies*, when it was probable that a loss from impairment of the loan had occurred and the amount of the loss was reasonably estimable. Thus, both banks would establish an allowance for loss in line with historical performance for borrowers of this type. Because the loan was performing, both banks would receive identical monthly payments of principal and interest. Generally, these cash receipts would be applied in accordance with the loan terms and a portion would be recorded as interest income, and the balance applied would reduce the banks' investment in the loan. At the end of the loan term, the balance and the related allowance for this loan would be eliminated.

SFAS 91 also directs both banks to recognize the remaining unamortized commitment fee over the life of the loan as an adjustment to interest income. Because the borrower's financial condition had deteriorated, both banks would likely have charged a higher interest rate than the rate stated in the loan commitment. As a result, at the time it became evident that the loan was to be drawn, Investment Bank B would record a liability on its balance sheet to recognize the difference between the actual interest rate of the loan and the interest rate a loan to a borrower with this level of risk

<sup>&</sup>lt;sup>9</sup>FAS 5 states that receivables by their nature usually involve some degree of uncertainty about their collectibility, in which case a loss contingency exists. If a loss were not probable and estimable, both banks would disclose in their financial statement footnotes the loss contingency when there was at least a reasonable possibility that a loss or additional loss might be incurred.

would have been made at—in essence the fair value interest rate. Investment Bank B would also amortize this liability over the life of the loan as an adjustment to interest income.

#### Loans Made Available for Sale

If Commercial Bank A and Investment Bank B's policies both permitted the firms to only hold loans to maturity when the borrowers were highly rated, it is unlikely that the banks would keep the loan in the previous scenario and would sell the loan in the hypothetical scenario soon after it was made. 10 The banks would follow different guidance that would provide similar results. Commercial Bank A would follow the guidance in the AICPA Statement of Position 01-6, Accounting by Certain Entities (Including Entities With Trade Receivables) That Lend to or Finance the Activities of Others that was issued in December 2001. According to this guidance, once bank management decides to sell a loan that had not been previously classified as held-for-sale, the loan's value should be adjusted to the lower of historical cost or fair value and any amount that historical cost exceeds fair value should be accounted for as a valuation allowance. Further, any subsequent changes in the loan's fair value that would be required to be adjusted through the valuation allowance, such as a further decline in fair value, would be recognized in income. However, if the fair value increased to the point where it exceed the historical carrying value, this gain would not be recognized in income unless the loan were sold. Investment Bank B would follow the guidance in the AICPA's Audit and Accounting Guide, Brokers and Dealers in Securities, as it did with loan commitments, and account for inventory at fair value and report changes in the fair value of the loan in net income.

For example, if bank management decided to sell the loan soon after it was drawn when some payments had been made to reduce the principal balance and the net book value of this loan was \$88,200,000 (unpaid principal balance of \$90,000,000 less the related allowance of \$1,800,000) and the fair value was 97 percent of the unpaid principal balance or \$87,300,000, both banks would recognize the decline in value of \$900,000 in earnings. While the loan remained available-for-sale, any changes in its fair value would be recorded in income. For example, if the loan's fair value

<sup>&</sup>lt;sup>10</sup>To keep this exception scenario example simple, it is also assumed that there are not conditions that would constrain Commercial Bank A and Investment Bank B from selling the loan, that both banks will not retain any interest in the loans sold, and the loans are sold without recourse.

declined further to \$85,500,000, both banks would recognize the additional decline in value of \$1,800,000 in earnings.

Table 6 summarizes the accounting similarities between Commercial Bank A and Investment Bank B for the loan sale. Although the two banks followed different guidance, the effect of the loan sale is the same for both banks.

Table 6: Accounting Differences for a Loan Sale				
Transaction	Commercial Bank A loss amount	Investment Bank B loss amount		
Transfer the loan to the held-				

 Transfer the loan to the held-for-sale portfolio
 <\$900,000>
 <\$900,000>

 Change in fair value
 <\$1,800,000>
 <\$1,800,000>

 Total loss on loan sale
 <\$2,700,000>
 <\$2,700,000>

Source: GAO.

# GAO Contacts and Staff Acknowledgments

GAO Contacts	Richard Hillman (202) 512-8678 Daniel Blair (202) 512-9401
Acknowledgments	In addition to those individuals named above, Emily Chalmers, Marshall Hamlett, Robert Pollard, and John Treanor made key contributions to this report.

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